Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A computer-readable medium encoded with a computer program for generating a live component comprising:

(a) a resource library;

(b) a live component editor for allowing a user to edit said live component utilizing resources from said resource library;

(c) a library of pre-built application modules, said pre-built application modules including a rendering module and an equation evaluation module;

(d) a viewer generator for creating a live component viewer from said pre-built application modules directed by said live component editor; and

(e) a component description generator for creating a live component description file directed by said live component editor;

wherein said live component includes said live component viewer and said live component description file.

Claim 2 (previously presented): The computer-readable medium according to claim 1, wherein said live component editor is a live component editor and simulator capable of simulating said live component.

Claim 3 (previously presented): The computer-readable medium according to claim 1, wherein said live component is downloaded from a server to a local system, wherein algorithms in said live component are executed on said local system.

Claim 4 (currently amended): The computer-readable medium according to claim 1, wherein said pre-built application modules include at least one of the following ~~computer executable instructions selected from the group consisting of~~:

(a) compiled code;

(b) assembled code; and

(c) interpreted script.

Claim 5 (currently amended): The computer-readable medium according to claim 1, wherein said live component viewer includes at least one of the following ~~computer executable instructions selected from the group consisting of~~:

(a) compiled code;

(b) assembled code; and

(c) interpreted script.

Claim 6 (previously presented): The computer-readable medium according to claim 1, wherein said live component description file includes live component viewer instructions.

Claim 7 (currently amended): The computer-readable medium according to claim 6, wherein said live component viewer instructions include ~~XML~~ an extensible markup language tag.

Claim 8 (previously presented): The computer-readable medium according to claim 6, wherein said live component viewer instructions includes data links.

Claim 9 (currently amended): The computer-readable medium according to claim 7, wherein said ~~XML is a MathML~~ extensible markup language tag includes a mathematic element.

Claim 10 (currently amended): The computer-readable medium according to claim 9, wherein said ~~MathML includes live MathML extensions~~ extensible markup language tag includes a functional extension to said mathematic element.

Claim 11 (currently amended): The computer-readable medium according to claim 10, wherein said ~~live MathML extensions~~ functional extension comprises at least one ~~extension selected from the group~~ of the following:

(a) a bi-directional equals operator;

(b) an edit attribute indicating if a value is editable; and

(c) a display attribute indicating a name and format for a display.

Claim 12 (currently amended): The computer-readable medium according to claim 1, wherein said resource library includes at least one of the following ~~set of~~:

(a) rules;

(b) definitions;

(c) default values; and

(d) resources.

Claim 13 (currently amended): A ~~method for generating a live component comprising the steps of~~ tangible computer-readable medium encoded with instructions, wherein execution of the instructions by one or more processors causes the "one or more processors" to perform steps comprising:

(a) opening an initial live component with a live component editor;

(b) iteratively updating said live component by;

(i) selecting an operand for modification;

(ii) selecting a step from the group of steps consisting of:

(1) modifying the properties of said selected operand; and

(2) inserting an additional operation[[,]] selected from a library of pre-built application modules[[,]] that operates on said operand using predetermined rules that correspond to said additional operation, said pre-built application modules including a rendering module and an equation evaluation module;

(c) saving the modified live component by:

(i) creating a live component viewer using said pre-built application modules directed by said rules based editor; and

(ii) creating a live component description file directed by said rules based editor;

wherein said live component includes said live component viewer and said live component description file.

Claim 14 (original): The method according to claim 13, wherein said live component editor is a live component editor and simulator.

Claim 15 (original): The method according to claim 13, wherein said initial live component is a default live component.

Claim 16 (original): The method according to claim 13, further including the step of downloading said live component from a server to a local system, wherein algorithms in said live component are executed on said local system.

Claim 17 (currently amended): The method according to claim 13, wherein said pre-built application modules include at least one of the following ~~computer-executable instructions selected from the group consisting of~~:

(a) compiled code;

(b) assembled code; and

(c) interpreted script.

Claim 18 (currently amended): The method according to claim 13, wherein said live component viewer includes computer executable instructions include at least one of the following ~~selected from the group consisting of~~:

(a) compiled code;

(b) assembled code; and

(c) interpreted script.

Claim 19 (original): The method according to claim 13, wherein said live component description file includes live component viewer instructions.

Claim 20 (currently amended): The method according to claim 13, wherein said live component viewer instructions include ~~XML~~ an extensible markup language tag.

Claim 21 (original): The method according to claim 19, wherein said live component viewer instructions includes data links.

Claim 22 (currently amended): The method according to claim 20, wherein said ~~XML is MathML~~ extensible markup language includes a mathematic element.

Claim 23 (currently amended): The method according to claim 22, wherein said ~~MathML includes live MathML extensions~~ extensible markup language includes a functional extension to said mathematic element.

Claim 24 (currently amended): The method according to claim 23, wherein said ~~live MathML extensions~~ functional extension comprises at least one ~~extension selected from the group~~ of the following:

(a) a bi-directional equals operator;

(b) an edit attribute indicating if a value is editable; and

(c) a display attribute indicating a name and format for a display.

Claim 25 (currently amended): The method according to claim 13, wherein said resource library includes at least one of the following ~~set of~~:

(a) rules;

(b) definitions;

(c) default values; and

(d) resources.